NOTES ON CHRYSOTIMUS WITH THE DESCRIPTION OF A NEW SPECIES (DIPTERA).

BY M. C. VAN DUZEE, BUFFALO, N. Y.

I took two of these little flies in Northern Ontario, one at Kearney and the other at Brulé Lake on the first and second of August, 1911. They are both males, and are no doubt the male of Loew's *Chrysotimus delicatus*, agreeing with his description in having the antennæ black, palpi yellow, and the posterior cross-vein before the middle of the wing.

It seems to me that the males described by Prof. Wheeler (Psyche Vol. V, p. 375) as the male of *C. pusio* Loew should have been considered a distinct species, as both males and females that he took in Wisconsin had the first two antennal joints-yellow, the third brown as is the case in *C. concinnus* Zett, an European species, but it is not likely that it is that species, as in *concinnus* the cross-vein is before the middle of the fifth vein, while in Wheeler's specimens it is at or beyond the middle, if it answers Loew's description of *pusio* as he states,. I have not seen Wheeler's material and therefore cannot be sure that his specimens represent a new species.

The males of this genus have the abdomen metallic green, while that of the female is mostly yellow. The hypopygium is conspicuous but scarcely bent under the abdomen; in all three species that I have seen it has a small, hairy, black appendage near the centre of the posterior edge

The males of *delicatus* Loew that I took in Canada have the abdomen and thorax bright metallic green with coppery reflections and thin grayish pollen; the hypopygium brown, conspicuous but imbedded, forming a rounded tip to the abdomen, which projects in a point slightly below the venter.

I took one male and three females at Colden, Erie Co, N. Y., Aug. 9th, 1914, which are no doubt the true *C. pusio* Loew. They have black antennæ and brown palpi; the cross-vein is in the middle of the fifth vein as in the male of *delicatus* Loew, but appears a January, 1916 little nearer the tip of the wing, as the wing seems somewhat shorter. (This character is of little value in separating the species, as the difference is so slight that it would not be noticed without comparing the two). The male hypopygium is rather large and somewhat bent froward, projecting nearly half its length below the venter of the abdomen.

I have received from Prof. J. M. Aldrich a male which evidently represents another species. I do not think it can be the same as the males Wheeler had. The following is a description of this species:—

Chrysotimus flavicornis, n. sp.

Male—Length 1.75 mm. Face and front green with white pollen, which does not conceal the ground colour; ocellar tubercle blackish; palpi brown; antennæ yellow (third joint missing in the type). Thorax pale green with bright coppery reflections and thickly covered with grayish white pollen; prescutellar depression sharply defined; pleuræ black with grayish pollen. Abdomen green with slightly coppery reflections and dulled with gray pollen; hairs and bristles of the thorax and abdomen yellow; hypopygium short, yellowish brown with a black appendage covered with rather long black hairs at the centre of the posterior side; venter yellow. Coxæ and legs yellow. Tegulæ, their cilia and the halteres yellow. Wings tinged with yellow; costa and veins yellow; third and fourth veins parallel beyond the cross-vein; apex of wing equidistant from the tips of the third and fourth veins; posterior cross-vein a little beyond the middle of the fifth vein.

Described from one male taken at Richmond Hill, L. I., N. Y., July 5th, by Mr Daecke. Type in the collection of Prof. J. M. Aldrich.

The yellow antennæ and thick pollen of the thorax and abdomen separate this form the two preceding species. It differs from Prof. Wheeler's description of the supposed male of *C. pusio* Loew in lacking the vivid green of the thorax and pleuræ, the green of the dorsum of the thorax in this species being pale and scarcely shining, and the pleuræ being black.

24